

The TCEQ Border Initiative

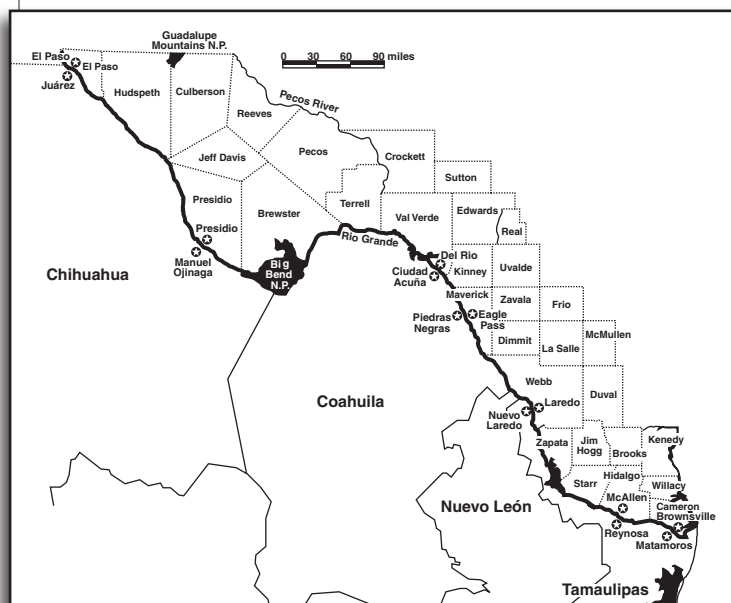
The Texas Commission on Environmental Quality has developed a comprehensive, cooperative initiative to serve border residents. The TCEQ leads individual projects and works with local, state, and federal stakeholders to maximize efforts to improve the environment of the U.S.-Mexico border region. Since environmental issues do not respect boundaries, it is a goal of the TCEQ to collaborate with as many willing partners as possible along the border. The initiative strives to increase—in the border region—cooperation and the exchange of knowledge, experience, and technology related to the environment, as well as promote the TCEQ's mission of protection of Texas' human and natural resources, consistent with sustainable economic development.

The TCEQ border initiative is led by Commissioner Carlos Rubinstein and coordinated through the Border Affairs team, under the direction of the executive director. The TCEQ will ensure that border efforts have a measurable environmental benefit.

Local Focus

- The TCEQ has three regional border offices: in Harlingen, Laredo, and El Paso. Regional-office personnel conduct regular investigations, respond to complaints, and serve as first responders for releases of hazardous materials, among other duties.
 - The Rio Grande watermaster is located in the Harlingen Office with a satellite office in Eagle Pass. The watermaster ensures deliveries of water to water-rights holders and enforces withdrawals.
 - Small Business and Local Government Assistance personnel in the three regional offices are there solely to assist with compliance in these areas.
- Central-office personnel in Austin also offer support.
 - For instance, personnel from the Public Education Program answer questions about pending TCEQ permits, explains the permitting process and opportunities for public participation. The Office of Chief Clerk conducts public meetings on permit applications around the state.
 - Austin personnel in the Office of Air and Office of Compliance and Enforcement work on El Paso air quality issues to help that area achieve and maintain attainment status with federal standards. The Monitoring Division operates and maintains monitoring stations along the Upper, Middle, and Lower Rio Grande to measure specific air quality parameters that vary by location. Data

Texas Border with Mexican States



from these monitors are available to the public on the TCEQ website, at <www.tceq.texas.gov/goto/monitors>.

- The agency has 78 full-time employees dedicated to border work, including regional and Border Affairs personnel.

State Focus

The agency collaborates on border environmental goals with various agencies. Unless otherwise indicated, these are legislatively mandated.

- Commissioner Rubinstein represents the TCEQ on the Texas-Mexico Strategic Investment Commission, an interagency group chaired by the Texas border commerce coordinator. Among its many charges, the commission must “identify areas of environmental protection that need to be addressed cooperatively between Texas and the Mexican states.”
- The border affairs manager serves on the Interagency Work Group on Border Issues of the Office of the Secretary of State. The TCEQ supplies information on the agency's impact on border communities for use in developing public policy.



- In addition, the agency's colonias coordinator, who is also the Border Affairs manager, represents the TCEQ in the Colonias Coordination Work Group. This interagency effort is led by the colonias coordinator in the Office of the Secretary of State and meets quarterly to review individual projects in Texas that ensure delivery of water, wastewater, stormwater drainage, and paved roads to colonia residents.
- The agency helps develop special border reports, in collaboration with other agencies. These include updates on agency activities for the annual Texas border-commerce coordinator's report and reports on colonia activities, such as the continuing reports required by Senate Bill 99, 80th regular session, on tracking the progress of colonia projects funded by the State of Texas.
- TCEQ personnel meet regularly with personnel from other agencies as needed to ensure completion of border-related projects and activities. For example, the TCEQ is an integral stakeholder in the Texas Water Infrastructure Coordination Committee.

National and International Focus

The TCEQ works nationally and internationally to accomplish environmental-protection goals. The agency works with other U.S. and Mexican states, federal agencies in both countries, and binational institutions created under environmental side agreements to the North American Free Trade Agreement (NAFTA).

Partnerships with Other States

- **Border Governors Conference.** Through the Border Governors Conference, the TCEQ participates in the Sustainable Development Work Table with members of all the U.S.-Mexico border states to develop annual declarations.
- **State-to-State Strategic Environmental Plans.** The TCEQ has developed strategic environmental plans with Texas' four neighboring Mexican states—Tamaulipas, Nuevo León, Coahuila, and Chihuahua—and is now updating these plans. The plans foster technical exchange and mutually beneficial cooperative work between the TCEQ and the counterpart environmental agencies of the other states.

The plan developed with Nuevo León has been applied extensively in the past two years, including a signing ceremony of a new agreement on May 5, 2010. In addition, the TCEQ and the Secretariat of Urban Development and Environment of Tamaulipas signed a new Memorandum of Cooperation on May 4, 2011. The TCEQ is also working with Coahuila to sign a new plan in 2012-2013.

Collaboration with NAFTA Environmental Agencies

- **North American Commission on Environmental Cooperation (CEC).** The TCEQ monitors the activities of the CEC, which was created under the trilateral (Canada-U.S.-Mexico) environmental side agreement to NAFTA. Under the CEC charter, each nation can have two committees advising its respective cabinet-level environmental minister regarding CEC implementation. Commissioner Rubinstein serves on the Governmental Advisory Committee and, with other members, makes consensus recommendations to the EPA Administrator.
- **The Border Environment Cooperation Commission and the North American Development Bank.** The TCEQ works closely with these two agencies, created under a U.S.-Mexico environmental side agreement to NAFTA, to ensure construction of environmental infrastructure in the border region with Mexico and to protect the environment and public health.

Partnerships with Local, State, Federal, and Binational Stakeholders

- **Border 2020.** The Border 2020 binational environmental program is the implementation plan of the La Paz Agreement for the protection of the U.S.-Mexico border environment. TCEQ management and personnel were deeply involved in developing the goals and strategies of Border 2020, building on the predecessor program, Border 2012.

Through Border 2020, the TCEQ works with local individuals and organizations (including border residents, local communities, academic institutions, and non-governmental organizations [NGOs]) and local, state, and federal agencies from both sides of the border on common environmental goals. The U.S. EPA and its Mexican counterpart, SEMARNAT, lead Border 2020—with close participation by TCEQ personnel in five binational policy forums, chaired by U.S. and Mexico federal representatives. Agency personnel also participate in two regional work groups—the Tri-State (Texas, New Mexico, and Chihuahua) and Four-State (Texas, Tamaulipas, Nuevo León, and Coahuila); Commissioner Rubinstein is the Texas co-chair for both of these regional work groups.

- **Joint Air Quality Advisory Committee.** The JAC is a binational group created under the La Paz Agreement. Composed of 22 members—half from each nation in the Paso del Norte air shed—the group makes recommendations to the Border 2020 Air Policy Forum on ways to improve air quality in the air shed, which is shared by both nations, and divided by the international border.

Since its creation in 1996 and due in large part to implemented recommendations—such

as delivery of oxygenated fuels to Ciudad Juárez to reduce carbon monoxide in the winter—the number of times the national carbon monoxide standard was exceeded has dropped from 30 per year to one or two. In El Paso, initiatives such as the vehicle inspection and maintenance program have resulted in no monitored violations since 2001, and federal redesignation to attainment status for carbon monoxide. Additionally, in October 2008 the EPA approved the 10-year maintenance plan for reductions of carbon monoxide emissions, as developed by the TCEQ.

- **Good Neighbor Environmental Board.** A representative of the State of Texas sits on the GNEB, an advisory board to the U.S. President and Congress on U.S.-Mexico border environmental and infrastructure issues. The GNEB is charged with producing an annual report for its clients. The TCEQ Border Affairs manager is the current Texas representative on the GNEB.
- **Lower Rio Grande Water Quality Initiative.** The agency is continuing efforts that began in 2008 with Mexican state and federal agencies, the EPA, and the International Boundary and Water Commission (IBWC) to develop a plan to restore and protect water quality in the Rio Grande downstream of Falcon Dam. The main objective of the plan is to establish a binational process for improving and protecting water quality in the Rio Grande.
- **Sister-City Planning.** Agency personnel from both the regional offices and Border Affairs support sister cities (cities located on both sides of the border) in their local planning efforts. In 2012, for example, personnel from the Laredo Office are working closely with the sister cities of Eagle Pass–Piedras Negras and Del Rio–Ciudad Acuña to update their joint contingency plans. Illustrating the collaborative nature of binational work, the project involved local and state participation, and received funding from the EPA through the Border 2020 program and support from the Northern Command of the U.S. Department of Defense. Based on input from local experts and city officials, the plans will be enhanced to include response to “all hazards,” such as hurricanes and floods, not just chemical releases.

Accomplishments, 2010–2012

The TCEQ completed the following projects between January 2010 and October 2012. The list represents a selection of topics in several categories: water quality and emergency water management; air quality; and emergency management, environmental education, and general (multi-media). This list is not comprehensive.

Water Quality and Emergency Water Management

Providing Compliance Assistance

- **Assisted Water Systems with Current or Pending Enforcement Actions.** In fiscal 2011, the Office of Water, through its contract for financial, managerial, and technical assistance, consulted with 19 troubled water and wastewater systems in the border area. The on-site assistance varied from consolidation assessment to assistance with compliance issues and rate setting.

Monitoring Water Quality

- **Conducted Aquatic-Life Monitoring of the Upper Pecos River.** The aquatic-life use for the Upper Pecos River (Segment 2311) is impaired for 24-hour dissolved oxygen and is on the 2010 303(d) list (report of impaired water bodies prepared by the TCEQ biennially, as required by the federal Clean Water Act). TCEQ surface water quality monitoring personnel collected water and biological samples in 2010 and 2011.

Data obtained from the Aquatic-Life Monitoring effort is being evaluated as part of the 2013 triennial revision to the Texas Surface Water Quality Standards to determine the most appropriate dissolved oxygen and aquatic life-use criteria for the Upper Pecos River. The data will also be used to track implementation of the Pecos River Watershed Protection Plan and potentially improve the tools used to evaluate attainment with aquatic life-use standards in arid regions of West Texas.

- **Installed Continuous Water Quality Monitoring on the Pecos River.** Eight continuous water quality monitoring stations have been installed in Texas and one near Red Bluff, New Mexico, to monitor conditions and changes in water quality during the implementation of the Pecos River Watershed Protection Plan. The real-time data are viewable online at <www.texaswaterdata.org>.
- **Monitored Water Quality of the Rio Grande.** The TCEQ Monitoring and Water Quality Planning divisions, in conjunction with personnel from the Rio Grande Watermaster’s Office, maintain and operate a network of seven continuous water quality monitoring stations downstream of Falcon Dam. The monitors measure the concentration of total dissolved solids (TDS—salts, in this case) in agricultural return flows.

These monitors supply data to Texas and Mexico to facilitate the management of TDS concentrations in the Lower Rio Grande, allowing for action if levels are so elevated that saline waters could damage agricultural production—a major economic activity in the area. Long-term flooding after Hurricane Alex in July 2010 largely destroyed this network of stations, but all the

stations were restored or relocated, as appropriate. The real-time data are viewable online at <www.texaswaterdata.org>.

Protecting Water Quality

- **Constructed Water Quality Wetlands in the Lower Rio Grande Valley.** The TCEQ Office of Water provided technical and financial assistance to the cities of La Feria, San Juan, and San Benito to design and construct wetlands to further improve the quality of water in area arroyos. This project was developed as part of the Watershed Protection Plan for the Arroyo Colorado <www.arroyocolorado.org>, which is a comprehensive strategy of voluntary actions to address the water quality impairments and concerns in the watershed. The wetlands, finished in 2010, provide ecological, recreational, and health benefits to the communities.

Emergency Water Management

- **Coordinated Effective Response during the July 2010 Flooding of the Rio Grande.** As liaisons between the IBWC and the Texas Division of Emergency Management, TCEQ personnel were instrumental in coordinating efforts to control flooding after Hurricane Alex. They served as the eyes and ears of the IBWC by patrolling floodgate levees saturated by the floodwater and notifying the IBWC of any cracks or boils discovered along 160 miles of Rio Grande levees from Falcon Dam downstream to Brownsville and 270 miles of floodway levees in Hidalgo, Cameron, and Willacy counties. In addition, specialized TCEQ teams conducted 75 water and wastewater inspections; three landfill inspections; and inspections of 2,799 irrigation and flood-control features—including lateral gates, levees, and temporary pumps—in the affected counties.

Air Quality

- **Provided Clean School Bus Grants.** The Texas Clean School Bus program awards grants to school districts and charter schools for the purchase and installation of retrofit technology to reduce diesel emissions and improve air quality for schoolchildren and bus drivers. In fiscal years 2010 and 2011, the program invested \$485,000 in state and federal funds for the improvement of onboard air quality for 70 school buses in five school districts along the Texas border with Mexico, including Brownsville.
- **Purchased and Installed a New Auto GC Air Monitor in El Paso.** Leveraging federal funds, the TCEQ purchased and installed a second Auto GC air monitor in El Paso. The new data from the monitor will more broadly characterize the specific pollutants and sources that can contribute to high-ozone days. The monitor began collecting data on Aug. 3, 2011.

- **Tested SmartWay Technologies for Drayage Trucks.** The SmartWay Transport Partnership is a voluntary collaboration between the EPA and the freight industry. Through a contract with the Texas Transportation Institute, and with EPA support, the TCEQ funded a study that characterized typical drayage-truck drive cycles, tested SmartWay technologies for emission reductions, and performed cost-benefit analyses. Among the SmartWay technologies analyzed were fuel additives, ultra-light trailers, and “eco-driving” techniques.

The study was completed in August 2009; the final report with results and recommendations was presented on April 15, 2010, at the 48th annual JAC meeting. On July 1, 2010, the JAC passed a joint resolution to encourage “eco-driving” techniques and to train drayage truck drivers to implement the practice. The report is available at <<http://tti.tamu.edu/projects/?id=3345>>.

Emergency Management, Environmental Education, and Other

Emergency Management and Preparedness

- **Assisted with Binational Knowledge Exchange and Tabletop Exercise in the Lower Rio Grande Valley.** In May 2010, more than 80 stakeholders representing municipalities on both sides of the border in the Rio Grande Valley plus state and federal governments met for three days at Rancho Viejo, Texas, for the third consecutive year to hold a “knowledge exchange” and “tabletop exercise.” TCEQ personnel organized the event, during which each authority described their available resources, roles, and planning mechanisms, with respect to cleanup and response to an international emergency. The exercise reenacted a train derailment with a release of ammonia and hydrofluoric acid as well as fuel-oil into the Rio Grande. In April 2011, the TCEQ assisted with a joint simulated-emergency exercise at the Veterans International Bridge between Brownsville and Matamoros.
- **Supported Binational Hazardous-Waste Operations and Emergency-Response Technical Training.** In August 2011, TCEQ personnel from the Harlingen and Laredo offices worked closely with the EPA, the U.S. Northern Command, and counterparts in Mexico to transfer emergency-response equipment and hold three one-week training events, one each for emergency responders from Matamoros, Reynosa, and Nuevo Laredo.

The training covered the use and maintenance of specialized equipment and included a 40-hour certification class in emergency response involving hazardous materials. The five-day training session culminated with a full-scale exercise allowing the students to practice skills learned during the training. The equipment transfers were recognized during ceremonies at each training location, attended

by public officials and first responders from both sides of the border. In El Paso, a similar training is planned for responders from Ciudad Juárez, as is a tri-national (U.S., Mexico, and Ysleta del Sur Pueblo) tabletop exercise.

Environmental Education

- **Developed Eco Vida Public-Service Announcements and Outreach in the Tri-State (Texas–New Mexico–Chihuahua) Area.** TCEQ personnel from the El Paso Office and Border Affairs worked with NGOs to conduct monthly stakeholder meetings, host a website, and develop short TV spots that presented environmentally friendly options for everyday activities.
- **Held Workshops on Petroleum Storage Tanks for the Regulated Community.** In November 2010, in Harlingen and El Paso, the Small Business and Local Government Assistance section of the TCEQ held free workshops where owners and operators of petroleum storage tanks and other members of the public could learn about state and federal PST regulations. The speakers explained the general rules and requirements for PSTs and how to use the TCEQ's latest compliance tool, the *PST Super Guide: A Comprehensive Guide to Compliance in Texas* (available upon request as agency publication RG-475).

Other: General Projects

The following projects are broader, or more general, in scope, addressing more than one category or “medium” (air, water, or waste), and often embracing a collaborative approach.

- **Continued State-to-State Environmental Programs.** In May 2010, then-TCEQ Commissioner Buddy Garcia signed a new agreement with Secretary of Sustainable Development Fernando Gutiérrez of Nuevo León, and later that month Commissioner Garcia met with Secretary Gutiérrez and Governor Medina of Nuevo León to discuss actions the TCEQ and the Secretariat of Sustainable Development (SDS) could implement. Based on an action item from that meeting, and as part of rebuilding efforts after Hurricane Alex in summer 2010, the TCEQ and the SDS coordinated a technical exchange with experts from both states on the potential use of selected waste streams in road-building (scrap tires, recycled plastics, and rubberized asphalt).

In May 2011, then-TCEQ Commissioner Garcia signed a new Memorandum of Cooperation with Homero de la Garza, the head of the Tamaulipas Secretariat of Environment and Urban Development (SEDUMA). The two agencies later worked together with the Border Environment Cooperation Commission to organize a binational training on best operating procedures for municipal solid waste landfill operators, held in September 2011, and a

one-day technical exchange on vehicle inspection and maintenance programs. A video summary of the latter is available at the TCEQ's YouTube channel, at <www.youtube.com/user/TCEQNews>.

- **Focused on Border Issues at the TCEQ Environmental Trade Fair.** During the TCEQ Environmental Trade Fair on May 2, 2012, Border Affairs organized a full day of presentations on important environmental quality issues along the Texas border with Mexico. Topics included compliance assistance and enforcement on the border; environmental programs of the Tamaulipas Secretariat of Environment and Urban Development (SEDUMA, in its Spanish acronym); stakeholder research along the lower Rio Grande/Río Bravo; binational emergency preparedness and response; and binational environmental quality. About 130 people attended the various panels.

Taking advantage of the Austin visit by Tamaulipas officials, TCEQ and SEDUMA staff toured a tire shop and discussed their respective state rules and regulations on scrap-tire programs. State-to-state collaboration across the international border is key to improving tire management along the border.

- **Participated in the Colonias Work Group, the Economically Distressed Areas Program Task Force, and the BienESTAR Workshop.** The agency's colonias coordinator represented the TCEQ at regular meetings to implement Senate Bill 99 (80th legislative session), regarding the tracking of state-funded projects that benefit colonias. The TCEQ leads meetings on specific colonia issues along the U.S.-Mexico border and in Nueces County and actively participates in colonia issues through quarterly meetings led by the secretary of state. In August 2011, the agency's colonias coordinator presented at the “BienESTAR Workshop” on environmental issues and health impacts in colonias. UT El Paso and the Pan American Health Organization hosted the workshop.
- **Participated on the Good Neighbor Environmental Board.** The TCEQ representative on the GNEB drafted the water section for the 13th annual GNEB report, *A Blueprint for Action on the U.S.-Mexico Border*. The report was released June 2010 in Washington, D.C. The 14th annual report, which focused on clean energy in the border region, was released December 2011. Both reports were accepted on behalf of the president by Nancy Sutley, chair of the Council on Environmental Quality.

Action Plan, 2012-2013

The following projects or programs will be carried out by the TCEQ in 2012 and 2013 as part of the agency's Border Initiative. This list is not comprehensive.

Water Quality, Availability, and Emergency Management

Protecting Water Quality

- **Assist Water Systems in the Border Area with Current or Pending Enforcement Actions.** Personnel from the TCEQ Office of Water will perform financial, managerial, and technical assessments for local water systems that are under enforcement. In addition, the TCEQ will either perform consolidation analyses or produce compliance-feasibility studies, as requested.
- **Conduct Training for Border Municipalities, Districts, and Investor-Owned Utilities.** The border area presents several unique challenges for water systems of all sizes, and the TCEQ Water Supply Division conducts regular workshops for local water utilities.
- **Develop a Binational Lower Rio Grande Water Quality Initiative.** The TCEQ is working with local, state, and federal agencies to develop a framework for a binational improvement plan to address water quality in the Rio Grande below Falcon Reservoir. These efforts include collaboration among agencies from the U.S. and Mexico, a binational data exchange, and the development of a plan to collect data and information on potential pollutant sources. In June 2012, state and federal agencies from both countries agreed to participate in a joint data review and potential exchange of information. Also in 2012, the participants began working on terms of reference that will establish the ground rules for binational cooperation on improving water quality in the Lower Rio Grande.

The TCEQ and the Texas General Land Office have been collaborating with the University of Texas at Austin to develop a local stakeholder-participation plan, including interviews of local residents and gathering important descriptive information that will help the development of a binational plan.

- **Participate in Upper Rio Grande Salinity Management.** The salinity management project is under way in southern New Mexico and far west Texas along the Rio Grande; the TCEQ participates as part of a coalition of local water utilities, irrigation districts, university research organizations, and state and federal agencies. Agency efforts include five continuous water quality monitoring stations on the upper Rio Grande and ten continuous water quality monitors on tributaries to the Rio Grande that affect the salinity in Amistad Reservoir. The real-time data are viewable online at <www.texaswaterdata.org>.

Phases I and II of the project, which included the evaluation of six specific areas of elevated salinity for targeted control projects, have been completed. Phase III, which began November 2011, will conduct feasibility, economic-loss, and pilot-scale project testing for two or three selected locations.

Managing Water Availability

- **Define “Extraordinary Drought.”** In 2007 the TCEQ, through the Border Governors Conference Water Table, worked to include a declaration that the Water Table would develop a definition of “extraordinary drought” for the Rio Grande Basin only. The lack of a definition of this term contributed to delays in settling Mexico’s Rio Grande water debt of 1.5 million acre-feet to the U.S. a decade ago. The TCEQ developed a draft definition and presented it at a March 2009 drought conference to several Mexican states on the BGC Water Table and, in September 2009, to all the Mexican states on the Water Table. Mexican states are considering the proposal and the TCEQ will continue to work with Mexican states. Once in agreement, a final draft will be submitted to appropriate federal agencies in both countries for approval.
- **Facilitate the Process for Establishing Environmental-Flow Standards for the Rio Grande, Rio Grande Estuary, and Lower Laguna Madre.** Senate Bill 3, 80th Texas Legislature, sets out a new regulatory approach for ensuring that surface water meets environmental-flow needs. The TCEQ will adopt basin-specific recommendations for environmental-flow standards to be used in deciding on new (and amended) water-right applications and to establish an amount of unappropriated water, if available, to be set aside for the environment.

The TCEQ will facilitate the process through the Basin and Bay Area Stakeholders Committee (BBASC). The rules for the three basins and bay system are to be completed by Sept. 1, 2013. The first meeting was held Jan. 25, 2011, in Weslaco. On July 27, 2012, the BBASC submitted its recommendations report to the Advisory Group. For more information see <www.tceq.texas.gov/goto/rioflowreport>.

Supporting Emergency Water Management

- **Serve on a Binational Data and Technical Support Committee to Enhance Emergency Response to Changing Conditions of the Rio Grande/Rio Bravo.** In close coordination with the National Weather Service, the U.S. IBWC, and their counterparts in Mexico, the TCEQ will work to (1) inventory existing data, (2) identify gaps in the data, and (3) implement an improved protocol for binational data exchange for daily operations. The binational group will meet regularly to further develop capacity to respond to emergency events that may affect the Rio Grande Basin such as floods, rains, hurricanes and other types of disasters.

Air Quality

Monitoring Air Quality

- **Continue Air Quality Monitoring along the U.S.-Mexico Border.** The TCEQ will continue to collect and report real-time air quality measurements at

various locations along the U.S.-Mexico border from Brownsville to El Paso–Ciudad Juárez and provide air quality forecasts to the public. A Texas map with PM (particulate matter) monitors and current levels is available at <www.tceq.texas.gov/goto/pm2-5>.

- **Operate and Maintain a New Auto-Gas Chromatograph Air Monitor in El Paso.** In fiscal 2011, the EPA and the TCEQ funded the installation of a new AutoGC monitor near Ascarate Park in east El Paso. With a 35 percent funding contribution from the EPA, the TCEQ will oversee the operation and maintenance of the monitor during fiscal years 2012 and 2013. The monitor will characterize pollutants that can be used in evaluating ozone formation in El Paso and is the first of its kind deployed to El Paso since 1995.
- **Advance Binational Air Quality Monitoring in Ciudad Juárez.** The Ciudad Juárez air quality monitoring network is integrated into TCEQ's reporting system for air quality data (Leading Environmental Analysis and Data System, or LEADS). After discussion in the JAC to expand the Juárez network, given the growth of that city's urban footprint and the desire for additional monitoring, in summer 2010 Ciudad Juárez deployed several sampling devices for PM10 (particulate matter smaller than 10 microns, or fine dust) to new regions of the city. The expansion of the Juárez network provides critical sampling data for the southwest and southeast parts of the city.
- **Deploy an Additional Camera in Big Bend National Park.** TCEQ Region 6 and Border Affairs personnel are currently preparing to deploy an additional high-resolution digital camera at Big Bend to augment the West Texas Visibility Monitoring Network (see the following item).
- **Enhance West Texas Visibility Monitoring.** The TCEQ currently operates the West Texas Visibility Monitoring Network, a network of high-resolution digital cameras used to identify and track natural events such as dust storms in the El Paso region and to track regional haze at Guadalupe and Big Bend national parks, both identified as federal Class I Areas. In 2011 and 2012, the TCEQ and the EPA shared the cost of a project to update and expand the network to include more monitoring sites, update old servers, and enhance the website image display and archival access to images.

Modeling and Analyzing Air Quality

- **Analyze Selected Emission Sources in Ciudad Juárez to Complement Broader Emissions Inventory.** In fall 2011, the EPA awarded funds for a one-time special project for a targeted analysis of select emission sources, including unpaved roads, cement plants and quarries, gasoline fueling stations, and automotive paint and body shops. The project started September 2012 and will end August 2013.

- **Develop Emissions Estimation Model for Cross-Border Vehicle Activity at El Paso–Juárez Ports of Entry.** Vehicle traffic at border crossings contributes to total on-road mobile-source emissions in border cities — and there is currently no methodology to estimate this impact. In partnership with the Texas Transportation Institute of Texas A&M University, the TCEQ will develop a robust estimation methodology to allow analysis of cross-border vehicle activity and accurate calculations of the potential effect of control strategies. The TCEQ will construct the model to facilitate modeling at other inland ports the length of the U.S.-Mexico border, especially Laredo–Nuevo Laredo, which is the inland port in the United States with the highest commercial volume.
- **Develop Ciudad Juárez Emissions Inventory.** In fiscal years 2011 and 2012, the EPA awarded funds to the TCEQ for special projects to improve air quality in the binational Paso del Norte air shed. Border Affairs personnel are working closely with the TCEQ Office of Air and contracting with the University of Texas Center for Energy and Environmental Resources to collaborate with officials from Mexico and develop an emissions inventory for Ciudad Juárez, Chihuahua. The new emissions inventory, combined with that of El Paso and Doña Ana County, New Mexico, will help both countries model air quality in the air shed, home to an estimated 2.1 million people (2010 census data).

Air Quality Planning

- **Continue Work on the Joint Advisory Committee for Air Quality Improvement.** The TCEQ serves as U.S. state co-chair and Border Affairs personnel perform administrative support for quarterly meetings of the JAC. In 2010, the JAC celebrated its 50th meeting and 15 years of operation. Meeting minutes, agendas, and presentations are maintained at the JAC website, <www.jac-ccc.org>.
- **Administer Rider 8 Funding for Air Quality Planning.** The Texas Legislature appropriated funds through Rider 8 of the 2009 appropriations bill to the TCEQ for air quality planning to reduce ozone in local areas around the state, including El Paso. Beginning in fall 2009, the TCEQ Air Quality Division began working with the El Paso Metropolitan Planning Organization (MPO) to develop and implement an array of grant projects worth close to \$800,000. In fall 2010, the TCEQ and the MPO signed a contract and began work on the project, which included installation of the new AutoGC Air Monitor (see the second item under "Monitoring Air Quality," above). In 2011 and early 2012, the MPO has been busy publishing a new Rider 8 website, continuing inventory and conceptual model work, and made presentations to the JAC and other organizations to educate the public on local air quality issues. See <<http://rider8ep.org>>.

- **Implement the 2008 Ozone Standard.** On Sept. 22, 2011, the EPA decided to retain the 2008 ozone standard of 0.075 parts per million. The 2011 design value for El Paso is 0.071 parts per million, which is below the current ozone standard. The TCEQ will continue to work with local organizations in El Paso to maintain the monitored ozone values below the 2008 standard, with an eye toward the next ozone standard review, scheduled for 2014. In February 2012, the EPA announced the Ozone Advance program, created to help areas that are currently meeting ozone attainment to stay that way. For more information, see <www.epa.gov/apti/Ozone_Advance_Draft_Guidance.pdf>.
- **Maintain Good Air Quality in El Paso.** El Paso continues to maintain ambient air levels below the current National Ambient Air Quality Standards for three pollutants—ozone, carbon monoxide, and particulate matter. However, enhanced monitoring and best management practices by the community are necessary to continue achieving the current standards and continue improving air quality to meet future standards. The TCEQ will continue to work with local governments to update the emissions inventory in the Texas part of the basin.

Recently, funds have been appropriated by several sponsors to update the emissions inventories in the New Mexico and Mexico parts of the air basin. In January 2012, the commissioners adopted a revised Memorandum of Agreement between the TCEQ and the City of El Paso, along with a rule to update PM control measures (see <www.tceq.texas.gov/goto/elpasosip>).

Fostering Energy Efficiency for Improved Air Quality

- **Support Energy Efficiency of Local Governments and Irrigation Districts along the Border.** Leveraging state funds and federal funds awarded by the EPA in summer 2012 for a one-time special project, the TCEQ will set up and administer a competitive grants program for local governments and irrigators for energy efficiency retrofits and/or energy-efficient designs. Investments in energy efficiency are investments in air quality. The project started September 2012 and will end August 2013.

Waste Management

- **Continue the Illegal Tire Dumping Initiative.** Illegal dumping of scrap and used tires in canals of active irrigation and water improvement districts throughout Texas impedes the adequate, intended flow of water. In addition, districts must spend their limited resources and incur disposal costs to clean up unauthorized dumps. To supplement standard compliance investigations of scrap-tire generators and transporters, the TCEQ developed the Illegal Tire Dumping Initiative. Developed in

partnership with districts and local governments, the initiative addresses the problem of illegal dumping in a variety of ways, among them educational outreach to tire generators—including used-tire workshops—and working with districts, such as the El Paso County Water Improvement District No. 1, on a scrap-tire collection day.

- **Improve Municipal Management of Scrap Tires.** Unauthorized disposal of scrap tires is a priority issue on the border, posing a significant threat to human health and air quality (such as in the event of a fire). The TCEQ will work with federal, state, and local stakeholders in the border region, both in the U.S. and Mexico, to develop and implement strategies to track and properly dispose of scrap tires. One such forum in which the TCEQ participates actively is the Border 2020 U.S.-Mexico Tire Initiative Collaborative Effort.

Emergency Management, Compliance, and Other

Emergency Management and Preparedness

- **Continue Coordinated Emergency-Response Measures with the International Boundary and Water Commission and Rio Grande Stakeholders.** The TCEQ interacts routinely with the U.S. section of the IBWC to coordinate emergency management response and discuss border safety. The TCEQ has also incorporated the IBWC into the state's emergency management as a counterpart in preparing for floods and other natural disasters along the Rio Grande. The two agencies will continue to support each other and partner on important matters.

On July 5, 2012, an 80-year-old irrigation canal, part of the Maverick County Water Control and Improvement District No. 1, broke. The rupture caused significant flooding, as waters spilled back to the Rio Grande, affecting local farmers and ranchers, and the Maverick County Water Works. TCEQ personnel from the watermaster program and the Laredo Office worked with local officials to manage a timely repair and restore fresh-water service.

- **Work with Stakeholders on Cross-Border Emergency-Response Planning.** The TCEQ will work with local stakeholders to create regional emergency-response plans from a binational perspective. Personnel will work with fire departments and *protección civil* (local and state emergency-response agencies in Mexico) to update and further develop sister-city contingency plans for the groups of sister cities along the international border Texas shares with the four Mexican states of Tamaulipas, Nuevo León, Coahuila, and Chihuahua. Improvements to these plans often include “all hazards,” not just responses to chemical releases. The TCEQ serves as lead for regular meetings, knowledge exchanges, and exercises where emergency officials from both countries respond to an incident in real time.

Environmental Enforcement and Compliance Assistance

- **Develop a Proposed Annex VI (Enforcement) to the La Paz Agreement.** The La Paz Agreement for the protection of the U.S.-Mexico environment does not explicitly reference environmental enforcement or compliance assistance. The proposed Annex VI would include these critical subjects and would be developed with the EPA and its Mexican counterpart, SEMARNAT, as well as other stakeholders.
- **Expand the Efforts of the Compliance Assistance, Environmental Stewardship, and Cooperative Enforcement (CAESCE) Task Force in the Border 2020 Three-State Regional Work Group.** The TCEQ Region 6 (El Paso) small business and local government assistance compliance specialist currently serves as co-leader for the Border 2020 CAESCE Task Force, which examines ways to promote environmental compliance and enforcement in the Paso del Norte region, especially with respect to transboundary movement of hazardous waste.

Other: General Projects

The following projects are broader, or more general, in scope, addressing more than one category or “medium” (air, water, or waste), and often embracing a collaborative approach.

- **Continue State-to-State Environmental Programs.** Agency personnel, especially in Border Affairs, will work with counterparts from Mexican state agencies on mutual issues with the aim of enhancing and protecting our shared border environment. The agency is updating these plans as necessary to accommodate ongoing needs, both of the TCEQ

and its counterpart agencies in the four neighboring Mexican states.

- **Serve on the Eagle Ford Shale Task Force.** The Eagle Ford Shale is one of the largest domestic crude-oil and natural-gas developments in more than 40 years. Roughly 50 miles wide and 400 miles long, the Eagle Ford spreads across Texas from the Mexican border toward Brazos County, covering all or parts of 24 Texas counties. The TCEQ Rio Grande watermaster was selected by the Texas Railroad Commission to participate on the Eagle Ford Shale Task Force. The Task Force had its first meeting in San Antonio on July 27, 2011, and meets regularly throughout the Eagle Ford Shale region. The most recent meeting was held Sept. 19, 2012, in Laredo.
- **Support Border Environmental Summits.** The TCEQ, through its Small Business and Environmental Assistance Division and border regional offices, provides logistical and other support to annual environmental summits in El Paso, Laredo, and the Lower Rio Grande Valley. In 2011, the three summits were attended by 830 people, including elected officials, industry representatives, and local residents. The 2012 summits were held on Oct. 4 (in Brownsville), Oct. 12 (El Paso), and Oct. 18 (Laredo).
- **Support Local Stakeholders through the Border 2020 Program.** Border Affairs personnel will support local stakeholders, including NGOs, in El Paso, the area from Del Rio to Zapata County, and the Lower Rio Grande Valley and assist them in applying for environmental-management grants to meet their needs. Border Affairs personnel worked closely with border stakeholders and the EPA to develop Border 2020, building on the success of Border 2012.

For more information:

Contact TCEQ Border Affairs at 512-239-3500 or by e-mail <ba@tceq.texas.gov>.

How is our customer service?

Fill out our online customer-satisfaction survey at
<www.tceq.texas.gov/goto/customersurvey>.